PROTECT FROM EROSION & RESTORE THE ENVIRONMENT

GRASSROOTS® SYNTHETIC EROSION CONTROL MAT

INSTALLATION GUIDE

Grassroots® is made in Australia from heavily UV stabilised synthetic fibres which are needle-punched together into an open weave three-dimensional structure, designed to offer a permanent engineered solution that assists the establishment of vegetation even in extreme environmental conditions.

BEFORE YOU BEGIN

Storage

Matting rolls should be stored in their original, unopened packaging. The designated storage area should be level, dry, well-drained, stable, and should protect the product from:

- Precipitation
- Chemicals
- Standing water
- Excessive heat
- Ultraviolet radiation
- Vandalism and animals

What You'll Need On Site

Prior to commencement of installation the following equipment will be required:

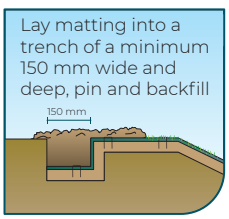
- Carpet knife, safety knife or scissors
- Hammer or mallet
- Spade or digger for trenching

PREPARING THE SURFACE

- It is recommended that weed affected areas are sprayed with herbicide prior to mat installation.
- Excavate and trim slope to smooth profile, removing obstructions such as tree stumps or rubble and filling in any voids. The smoother the surface, the better contact between soil and matting.
- Excavate anchor trenches along the top edge as specified.
- Topsoil is required to successfully grow grass and plants. Evenly spread topsoil across the surface to required depth.
- All pre-seeding of the soil to be carried out prior to laying Grassroots.

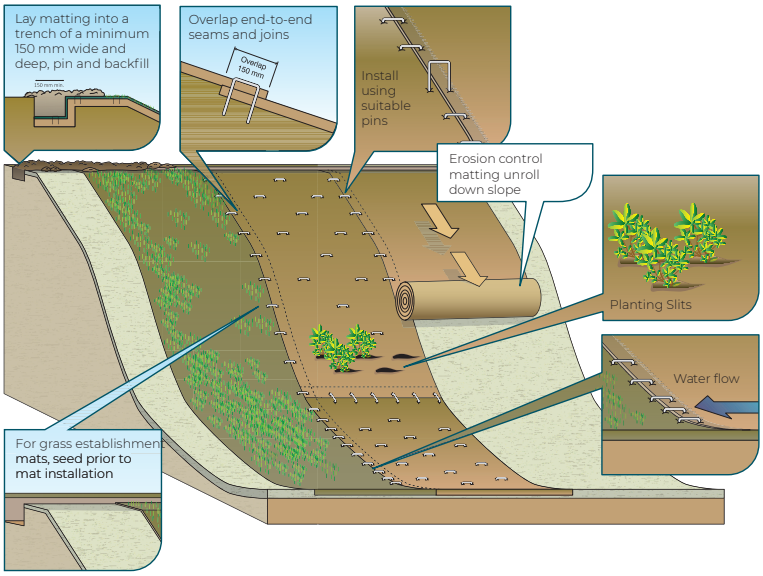
TRENCHING

- A trench is necessary on gradients of 1:3 or steeper and in riparian or flood areas.
- Dig a trench at the top of the slope, minimum width and depth of 150 mm.
- Pin the end of the roll into the bottom of the trench at 300 mm intervals.
- Back-fill the trench and roll the matting down the slope with a minimum overlap of 150 mm.
- Pin material ensuring the overlaps are secured well.
- Trenches should be deeper for channels and slopes steeper than 1:1.



LAYING THE MATTING

- The material should be rolled from top to bottom of steep batters, as opposed to across the batter. The material may sag between fastening pins if laid across steep slopes.
- Minimum overlap of 150 mm is recommended. Overlaps should be pinned at 300 mm intervals.
- The matting should be laid down the flow line in swale drains. The leading edges should be trenched and overlaps must follow the flow line downstream.
- Sites subject to flooding require the laying pattern to mimic a fish-scale pattern. The material should be laid so that the leading edges are not exposed to water flow.
- Do not pull the material tightly across the soil surface. Allow it to contour to the soil profile and into undulations. This allows the material to settle and bond with the topsoil.
- If the site requires the matting to be laid across slopes, then the top edge should be trenched and pinned at a higher rate.



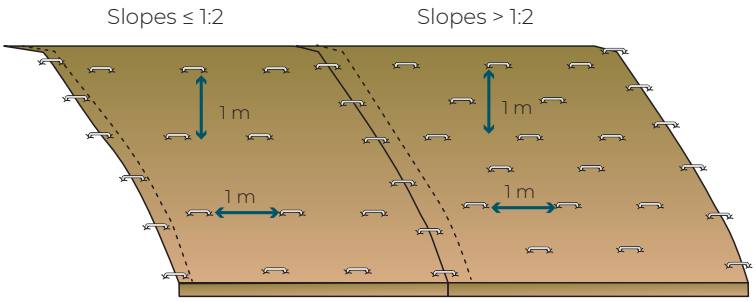
PLANTING

Spread seed and fertiliser consistently over the topsoil prior to installation. Applying seed via a hydro-seeding machine is recommended for larger areas.

The material is designed to allow seeds to germinate successfully and grow through the matting providing permanent vegetative reinforcement.

PINNING

- Minimum pinning frequency is shown in the adjacent figure.
- Additional pinning may be required in undulating soil with low spots to ensure intimate contact between mat and soil.
- On steeper batters, flooding areas or areas prone to high wind and unstable subsoils, a higher pinning rate should be used.
- Pinning is extremely important to the long-term stability of the matting. Insufficient pinning may result in the material uplift from wind or creating a path for water access under the mat.
- Pin type and size will depend on site conditions, soil depth, compaction, wind and water flow. For suggested pins sizes, please refer to the designer. Contact Geofabrics for options available in your area.



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